

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jose Fortuna Examiner #: 72391 Date: 8-24-05
Art Unit: 1731 Phone Number 301-272-1188 Serial Number 09/658,924
Mail Box and Bldg/Room Location: 7-031 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

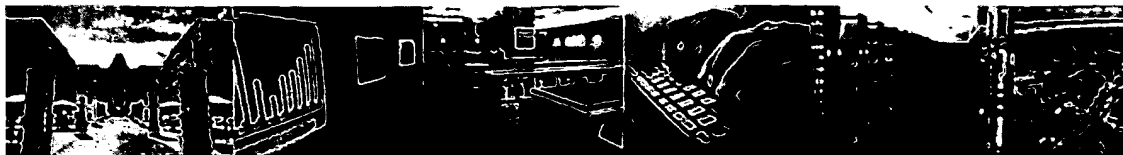
**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please see attached

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	Type of Search	Vendors and cost where applicable
Searcher: <u>ES</u>	NA Sequence (#) _____	STN <u>\$50.00</u>
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Searcher Location: _____	Structure (#) <u>✓ (1)</u>	Questel/Orbit _____
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Date Completed: <u>8-25-05</u>	Litigation _____	Lexis/Nexis _____
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163689
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Pat & T.M. Office

Your Contact Information:

* indicates mandatory information.

Your Name: *Email Address:
(e.g., Susan.Smith@uspto.gov)*Employee No.: *Art Unit/Org.: *Office Location: *Phone No.: Mailbox No.: 
SPS 1701*Case serial number:

If not related to a patent application, please enter NA here.

Class / Subclass(es) Earliest Priority Filing Date:

Format preferred for results:

☒ Paper ☐ Diskette ☒ E-mail

Provide detailed information on your search topic:

- In your own words, describe in detail the concepts or subjects you want us to search.
- Include synonyms, keywords, and acronyms. Define terms that have special meanings.
- *For Chemical Structure Searches Only*
Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers
- *For Sequence Searches Only*
Include all pertinent information (parent, child, divisional, or issued patent numbers) along with the application serial number.
- *For Foreign Patent Family Searches Only*
Include the country name and patent number.
- Provide examples or give us relevant citations, authors, etc., if known.
- FAX or send the abstract, pertinent claims (not all of the claims), drawings, or chemical structures to the EIC or branch library.

Enter your Search Topic Information below:

Compounds of claim 11, see newest claims.

Special Instructions and Other Comments:

(For fastest service, let us know the best times to contact you, in case the searcher needs further clarification search.)

I need this ASAP, at least for the next week. I know that I need approval from my SPE, how do I do that electrically?

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Last modified 08/24/2005 14:23:08

Mellerson, Kendra

From: Fortuna, Jose
Sent: Wednesday, August 24, 2005 2:28 PM
To: STIC-EIC1700
Subject: Database Search Request

Requester:

Jose Fortuna (TC1700)

Art Unit:

1731

Employee Number:

72391

Office Location:

REM 7D31

Phone Number:

571-272-1188

Mailbox Number:

21188

Case serial number:

09/658,924

Class / Subclass(es):

162/070

Earliest Priority Filing Date:

09/15/1999

Format preferred for results:

Paper

Search Topic Information:

Compounds of claim 11, see newest claims.

Special Instructions and Other Comments:

I need this ASAP, at least for the next week. I know that I need aproval from my SPE, how do I do that electrically?

=> file reg
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L1          STR

      FILE 'REGISTRY'
L2          0 S L1
L3          STR L1
L4          50 S L3

      FILE 'HCAPLUS'
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L6          456 S DEVORE ?/AU
L7          41159 S THOMPSON ?/AU
L8          2 S L5 AND L6 AND L7
           SEL L8 1-2 RN

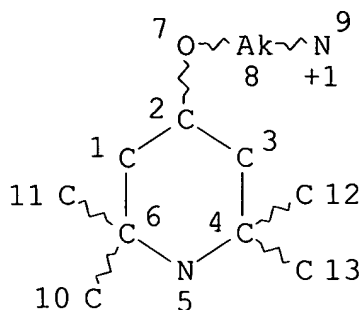
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L14         38 S L1 SSS FUL SUB=L12
           SAV L14 FOR924A/A

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      FILE 'ZCAPLUS'
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      FILE 'REGISTRY'
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=> d l14 que stat
L1 STR



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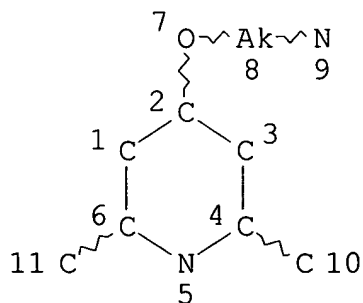
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DEFAULT ECLEVEL IS LIMITED			

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 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L3 STR



NODE ATTRIBUTES:

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NSPEC	IS RC	AT	10
NSPEC	IS RC	AT	11
DEFAULT MLEVEL IS ATOM			
DEFAULT ECLEVEL IS LIMITED			

GRAPH ATTRIBUTES:

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NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L12 994 SEA FILE=REGISTRY SSS FUL L3

L14 38 SEA FILE=REGISTRY SUB=L12 SSS FUL L1

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38 ANSWERS

SEARCH TIME: 00.00.01

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=> d l16 1-9 all hitstr

L16 ANSWER 1 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:246731 ZCAPLUS

DN 142:446759

ED Entered STN: 22 Mar 2005

TI TEMPO-derived task-specific ionic liquids for oxidation of alcohols

AU Wu, Xue-E.; Ma, Li; Ding, Meng-Xian; Gao, Lian-Xun

CS State Key Laboratory of Polymer Physics and Chemistry, Changchun
Institute of Applied Chemistry, Chinese Academy of Science and
Graduate School of Chinese Academy of Sciences, Changchun, 130022,
Peop. Rep. China

SO Synlett (2005), (4), 607-610

CODEN: SYNLES; ISSN: 0936-5214

PB Georg Thieme Verlag

DT Journal

LA English

CC 21-2 (General Organic Chemistry)

Section cross-reference(s): 25

AB A novel 2,2,6,6-tetramethylpiperidine-1-oxyl (TEMPO) radical bearing
an ionic liq.-type appendage has been prep'd., and its catalytic
activity for the selective oxidn. of alcs. to the corresponding
carbonyl compds. in ionic liq.-aq. biphasic conditions has been
investigated. The ionic liq.-supported TEMPO radical shows catalyst
properties similar to those of non-supported counterpart in terms of
activity and selectivity, and can be easily recycled and reused
without loss of activity and selectivity.

ST chemoselective oxidn alc TEMPO ionic liq; aldehyde ketone
chemoselective prep'n

- IT Ionic liquids
Oxidation
(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)
- IT Alcohols, reactions
(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)
- IT Carbonyl compounds (organic), preparation
(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)
- IT 2564-83-2, TEMPO
(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)
- IT 91-01-0 98-85-1 100-51-6, Benzenemethanol, reactions 107-18-6, 2-Propen-1-ol, reactions 108-93-0, Cyclohexanol, reactions 111-87-5, 1-Octanol, reactions 589-18-4 616-47-7 619-73-8 2226-96-2 16308-92-2 17849-38-6
(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)
- IT 35356-60-6P **851233-40-4P 851233-42-6P**
(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)
- IT 89-98-5P 98-86-2P, preparation 100-52-7P, Benzaldehyde, preparation 104-87-0P 107-02-8P, 2-Propenal, preparation 108-94-1P, Cyclohexanone, preparation 119-61-9P, preparation 124-13-0P, Octanal 555-16-8P, preparation 15764-16-6P
(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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- (2) Anelli, P; J Org Chem 1987, V52, P2559
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- (18) Fuller, R; J Chem Soc, Chem Commun 1994, P299

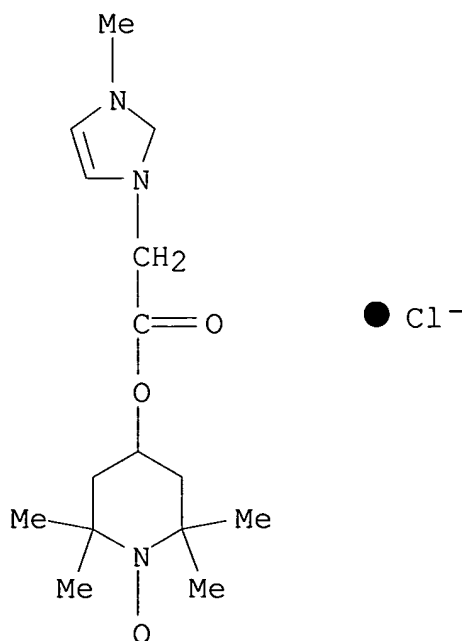
- (19) Heeres, A; Carbohydr Res 1997, V299, P221 ZCAPLUS
 (20) Hudlicky, M; Oxidations in Organic Chemistry 1990
 (21) Pozzi, C; Org Lett 2004, V6, P441
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 (24) Wasserscheid, P; Ionic Liquids in Synthesis 2003
 (25) Wierzbicki, A; Proceedings of the Symposium on Advances in Solvent Selection and Substitution for Extraction 2000
 (26) Zhao, M; J Org Chem 1999, V64, P2564 ZCAPLUS

IT **851233-40-4P 851233-42-6P**

(chemoselective oxidn. of primary and secondary alcs. to aldehydes and ketones using TEMPO-derived ionic liqs.)

RN 851233-40-4 ZCAPLUS

CN 1-Piperidinyloxy, 2,2,6,6-tetramethyl-4-[[(3-methyl-1H-imidazolium-1-yl)acetyl]oxy]-, chloride (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

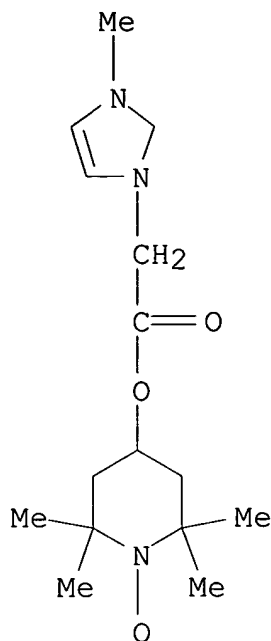
RN 851233-42-6 ZCAPLUS

CN 1-Piperidinyloxy, 2,2,6,6-tetramethyl-4-[[(3-methyl-1H-imidazolium-1-yl)acetyl]oxy]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 851233-41-5

CMF C15 H25 N3 O3



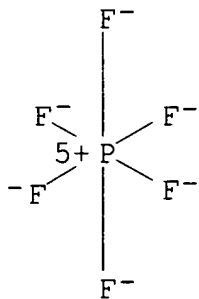
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



L16 ANSWER 2 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:208486 ZCAPLUS

DN 134:239198

ED Entered STN: 22 Mar 2001

TI Chlorohydrin and cationic compounds for pulp or paper stabilizing

Current Application

IN Cunkle, Glen Thomas; Devore, David; Thompson, Thomas Friend
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 49 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM D21H021-14
 ICS D21C009-00; C07D211-94; C07D401-04; C07D401-12; C07D471-10;
 C07D401-04; C07D211-00; C07D205-00; C07D471-10; C07D235-00;
 C07D221-00

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001020078	A1	20010322	WO 2000-EP8750	20000907
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2382448	AA	20010322	CA 2000-2382448	20000907
BR 2000014004	A	20020521	BR 2000-14004	20000907
EP 1212486	A1	20020612	EP 2000-965939	20000907
EP 1212486	B1	20050406		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003527326	T2	20030916	JP 2001-523442	20000907
AU 777318	B2	20041014	AU 2000-76513	20000907
AT 292707	E	20050415	AT 2000-965939	20000907

07

ZA 2002002061 A 20030910 ZA 2002-2061

200203
13

US 2005092452 A1 20050505 US 2004-978673

200411
01*Current application 60/154,112*

PRAI US 1999-154112P	P	19990915
WO 2000-EP8750	W	20000907
US 2000-658924	A1	20000911

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 2001020078	ICM	D21H021-14
	ICS	D21C009-00; C07D211-94; C07D401-04; C07D401-12; C07D471-10; C07D401-04; C07D211-00; C07D205-00; C07D471-10; C07D235-00; C07D221-00
WO 2001020078	ECLA	C07D211/94; C07D401/04+211+205; C07D401/12+211+205; C07D401/14R+211+205; C07D471/10+235B+221B; C08K005/3435+L97/00; D21H021/14B
US 2005092452	NCL	162/158.000
	ECLA	C07D211/94; C07D401/04+211+205; C07D401/12+211+205; C07D401/14R+211+205; C07D471/10+235B+221B; C08K005/3435+L97/00; D21H021/14B
AB		Chlorohydrin and cationic compds. contg. nitroxide or hydroxylamine moieties are effective in stabilizing pulp or paper, esp. pulp or paper contg. lignin, against yellowing and discoloration due to the adverse effects of light. This performance is often further enhanced by the presence of one or more coadditives selected from the group consisting of the UV absorbers, the polymeric inhibitors, the nitrones, the fluorescent whitening agents and metal chelating agents. Thus 4-(2-dimethylamino)ethoxy-1-oxyl-2,2,6,6-tetramethylpiperidine was prepd. from 1-oxyl-4-hydroxy-2,2,6,6-tetramethylpiperidine and used with citric acid, a metal chelating agent in BTMP sheet, showing good yellowing protection.
ST		chlorohydrin cationic compd pulp paper stabilizing
IT		Cellulose pulp
		Paper
		Stabilizing agents
		(chlorohydrin and cationic compds. for pulp or paper stabilizing)
IT	329911-04-8P 329911-05-9P 329911-06-0P 329911-07-1P	
	329911-12-8P 329911-18-4P 329911-19-5P	
	(chlorohydrin and cationic compds. for pulp or paper stabilizing)	
IT	122586-97-4P 329910-97-6P 329910-99-8P 329911-00-4P	
	329911-01-5P 329911-02-6P 329911-03-7P 329911-08-2P	
	329911-10-6P 329911-14-0P 329911-16-2P 329911-17-3P	

(chlorohydrin and cationic compds. for pulp or paper stabilizing)
 IT 75-50-3, Trimethylamine, reactions 106-89-8, Epichlorohydrin,
 reactions 106-94-5 107-99-3 109-73-9, n-Butylamine, reactions
 629-03-8 2226-96-2 15871-56-4 122413-85-8 122586-98-5
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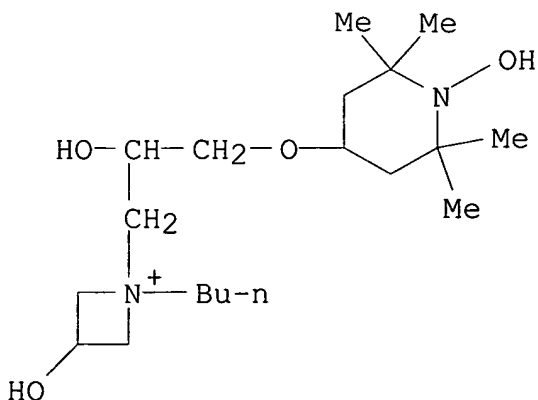
(chlorohydrin and cationic compds. for pulp or paper stabilizing)
 IT 329910-98-7P

(chlorohydrin and cationic compds. for pulp or paper stabilizing)
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Ciba Geigy Ag; EP 0309401 A 1989 ZCAPLUS
- (2) Ciba Geigy Ag; EP 0634399 A 1995 ZCAPLUS
- (3) Ciba Geigy Ag; WO 9905108 A 1999 ZCAPLUS
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- (6) Klein; ZCAPLUS
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- (8) Sankyo Co; EP 0006536 A 1980 ZCAPLUS

IT **329911-12-8P 329911-18-4P 329911-19-5P**

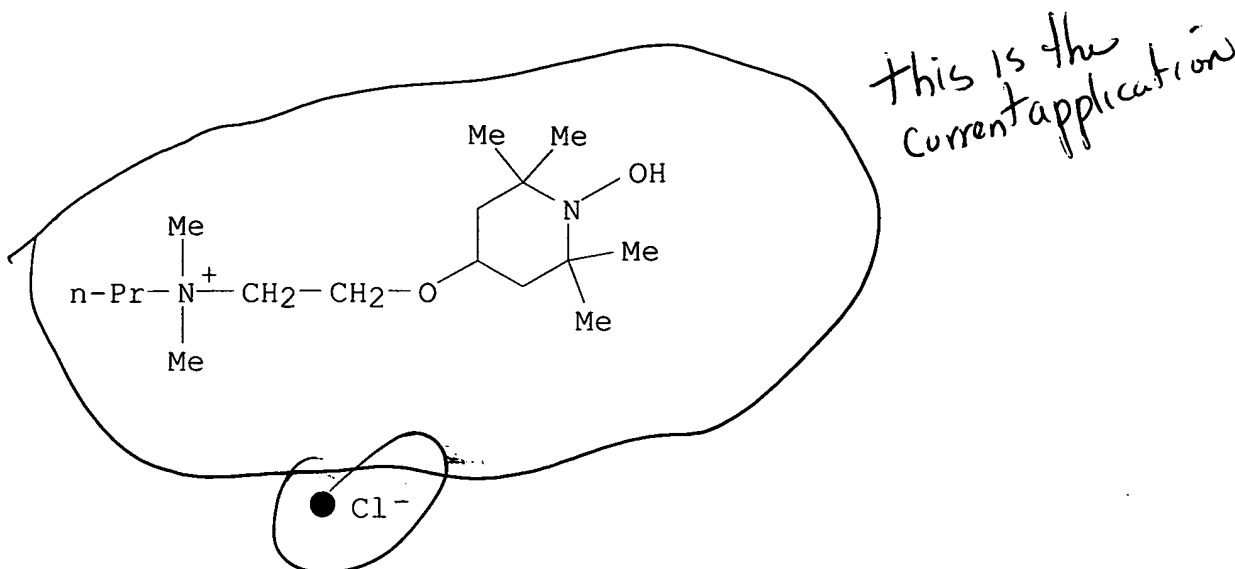
(chlorohydrin and cationic compds. for pulp or paper stabilizing)
 RN 329911-12-8 ZCAPLUS
 CN Azetidinium, 1-butyl-3-hydroxy-1-[2-hydroxy-3-[(1-hydroxy-2,2,6,6-tetramethyl-4-piperidinyloxy)propyl]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

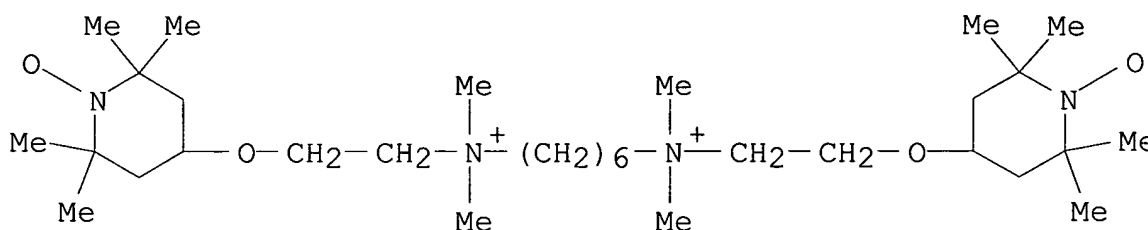
RN 329911-18-4 ZCAPLUS

CN 1-Propanaminium, N-[2-[(1-hydroxy-2,2,6,6-tetramethyl-4-piperidinyloxy)ethyl]-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)



RN 329911-19-5 ZCAPLUS

CN 1-Piperidinyloxy, 4,4'-[1,6-hexanediylbis[(dimethyliminio)-2,1-ethanediylloxy]]bis[2,2,6,6-tetramethyl-, dibromide (9CI) (CA INDEX NAME)

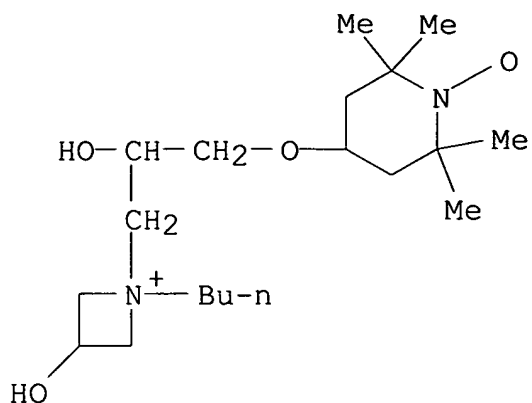
 $\bullet 2 \text{ Br}^-$

IT 329911-14-0P

(chlorohydrin and cationic compds. for pulp or paper stabilizing)

RN 329911-14-0 ZCAPLUS

CN 1-Piperidinyloxy, 4-[3-(1-butyl-3-hydroxyazetidinio)-2-hydroxypropoxy]-2,2,6,6-tetramethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L16 ANSWER 3 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:96214 ZCAPLUS
 DN 130:169756
 ED Entered STN: 12 Feb 1999
 TI Inhibition of pulp and paper yellowing using nitroxides and other
 co-additives
 IN Seltzer, Raymond; Wolf, Jean-Pierre; Heitner, Cyril; Schmidt, John
 Alois; McGarry, Peter Francis; Cunkle, Glen Thomas; Nelson, Randall
 Bruce
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 195 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07D211-94
 ICS D21H021-14; D21C009-00; C07D405-12
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9905108	A1	19990204	WO 1998-EP4381	19980714

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
 DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP,
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 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,

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 14
 JP 2001510881 T2 20010807 JP 2000-504107 199807
 14
 RU 2223985 C2 20040220 RU 2000-104506 199807
 14
 ZA 9806521 A 19990125 ZA 1998-6521 199807
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 TW 460641 B 20011021 TW 1998-87114815 199809
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 US 6447644 B2 20020910 US 2001-974382 200110
 10
 US 2002124980 A1 20020912
 PRAI US 1997-53489P P 19970723
 US 1997-54968P P 19970807
 WO 1998-EP4381 W 19980714
 US 1998-119567 A3 19980720
 US 2000-573401 A3 20000518
 CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

 WO 9905108 ICM C07D211-94
 ICS D21H021-14; D21C009-00; C07D405-12
 WO 9905108 ECLA C07D211/94; C07D405/12+303+211;
 C08K005/3435+L97/00; D21C009/00B2D; D21H021/14B
 US 6447644 NCL 162/158.000; 162/070.000; 162/071.000;

162/076.000; 162/077.000; 162/081.000;
162/160.000; 162/162.000; 162/164.600;
162/164.700; 162/165.000; 162/166.000;
162/167.000

ECLA C07D211/94; C07D405/12+303+211;
C08K005/3435+L97/00; D21C009/00B2D; D21H021/14B

OS MARPAT 130:169756

AB Pulps or papers, esp. semichem. or thermomech. pulps or papers, which still contain lignin, have enhanced resistance to yellowing when they contain an effective stabilizing amt. of a hindered amine compd. which preferably is a nitroxide, a hydroxylamine or an ammonium salt thereof. The yellowing resistance is often further enhanced by the presence of one or more co-additives selected from the group consisting of the UV absorbers, the polymeric inhibitors, the nitrones, the fluorescent whitening agents, metal chelating agents, S-contg. stabilizers, metal salts and diene compds. Combinations of nitroxides, hydroxylamines or their salts, benzotriazole or benzophenone UV absorbers and a metal chelating agent are particularly effective. Selected derivs. of 1-oxyl-2,2,6,6-tetramethylpiperidin-4-ol and selected hydroxylamine salts are novel compds. and are surprisingly effective for this purpose.

ST mech pulp yellowing preventer hindered amine; paper yellowing preventer hindered amine; nitroxide paper yellowing preventer; ammonium salt paper yellowing preventer; nitron paper yellowing preventer; hydroxylamine paper yellowing preventer; light stabilizer hindered amine paper yellowing preventer; oxyl tetramethylpiperidinol paper yellowing preventer; discoloration prevention hindered amine paper thermomech pulp; free radical discoloration prevention paper thermomech pulp

IT Amines, preparation

(hindered; yellowing inhibitor for pulp and paper and manuf.)

IT Paper

Whitening agents

Yellowing prevention

(inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT Polyoxyalkylenes, uses

(inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT Cellulose pulp

(mech.; reactant for manuf. of yellowing inhibitor for pulp and paper)

IT Cellulose pulp

(thermomech.; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT Chelating agents

UV stabilizers

(yellowing inhibitor for pulp and paper and manuf.)

IT Nitrones
Nitroxides
(yellowing inhibitor for pulp and paper and manuf.)

IT 131841-00-4, PAX 3008
(PAX 3008; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 131840-97-6, PAX 3036
(PAX 3036; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 122809-65-8, PAX 3123
(PAX 3123; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 122809-43-2, PAX 3136
(PAX 3136; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 132416-36-5, PAX 3156
(PAX 3156; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 122809-69-2, PAX 3267
(PAX 3267; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 76656-36-5, Uvinul 3048
(Uvinul 3048; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 131-54-4, 2,2'-Dihydroxy-4,4'-dimethoxybenzophenone
(Uvinul 3049; inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 181355-39-5
(a inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 2226-96-2P, 1-Oxyl-2,2,6,6-tetramethyl-4-hydroxypiperidine
2516-92-9P 2564-83-2P, TEMPO 3637-10-3P 4972-11-6P
14691-89-5P 150981-05-8P 220410-68-4P 220410-69-5P
220410-70-8P 220410-72-0P
(inhibition of pulp and paper yellowing using nitroxides and other co-additives)

IT 67-43-6, DTPA 79-42-5, Thiolactic acid 87-18-3 96-27-5,
1-Thioglycerol 104-98-3 107-96-0 110-44-1, 2,4-Hexadienoic
acid 111-17-1, 3,3'-Thiodipropionic acid 118-56-9 118-60-5
123-81-9, Glycol dimercaptoacetate 131-53-3 131-55-5,
2,2',4,4'-Tetrahydroxybenzophenone 131-56-6, 2,4-
Dihydroxybenzophenone 131-57-7 136-44-7 150-13-0,
4-Aminobenzoic acid 367-51-1, Sodium thioglycolate 1843-05-6
2122-49-8 2150-02-9, 2,2'-Oxydiethanethiol 2154-68-9,
3-Carboxy-2,2,5,5-tetramethyl-1-pyrrolidinyloxy 2161-90-2,
1-Methoxy-1,3-cyclohexadiene 2403-88-5, 2,2,6,6-Tetramethyl-4-
hydroxypiperidine 2406-25-9, Di-tert-butyl nitroxide 2440-22-4

2516-88-3 2516-91-8 2564-88-7 2725-22-6 2886-59-1,
 1-Methoxy-1,4-cyclohexadiene 2896-70-0 2985-59-3 3147-75-9,
 2-(2-Hydroxy-5-tert-octylphenyl)-2H-benzotriazole 3225-26-1
 3264-93-5 3317-61-1, 5,5-Dimethyl-1-pyrroline N-oxide 3376-24-7,
 N-tert-Butyl-.alpha.-phenylnitron 3483-12-3, Dithiothreitol
 3551-21-1, Bis(1-oxyl-2,2,6,6-tetramethylpiperidin-4-yl)isophthalate
 3846-71-7 3864-99-1, 5-Chloro-2-(2-hydroxy-3,5-di-tert-
 butylphenyl)-2H-benzotriazole 3936-30-9 4065-45-6,
 2-Hydroxy-4-methoxybenzophenone-5-sulfonic acid 4193-55-9,
 4,4'-Bis[4-anilino-6-bis(2-hydroxyethyl)amino-s-triazin-2-yl]amino-
 2,2'-stilbenedisulfonic acid, disodium salt 4221-80-1 5232-99-5
 5466-77-3 6197-30-4 6628-37-1 7487-88-9, Sulfuric acid
 magnesium salt (1:1), uses 7733-02-0, Zinc sulfate (ZnSO4)
 7785-87-7, Manganese sulfate (MnSO4) 10193-99-4, Pentaerythritol
 tetrathioglycolate 10531-39-2, Di-tert-butyl hydroxylamine
 16302-61-7 17102-64-6, Trans,Trans-2,4-Hexadien-1-ol 18796-03-7
 21245-02-3, 2-Ethylhexyl 4-dimethylaminobenzoate 22504-50-3
 22535-46-2, Sodium thiolactate 22977-67-9 23949-66-8
 24938-55-4, Polymethylene sulfide 25322-68-3 25973-55-1,
 2-(2-Hydroxy-3,5-di-tert-amylphenyl)-2H-benzotriazole 27503-81-7,
 2-Phenyl-5-benzimidazole sulfonic acid 33007-83-9 37149-18-1
 39753-68-9 39753-69-0 40289-91-6 40908-37-0 41025-56-3,
 Disodium methylene bis thiopropionate 42267-40-3, Sodium
 .beta.-mercaptopropionate 50613-98-4 51158-47-5 52326-65-5,
 1-Acetyl-2,2,6,6-tetramethylpiperidin-4-one 52793-97-2
 54606-49-4, 3-Aminomethyl-2,2,5,5-tetramethyl-1-pyrrolidinyloxy
 57834-33-0 58882-17-0 63941-51-5 65265-85-2 65816-20-8
 67845-93-6 68865-56-5 69119-80-8 70321-86-7 73851-98-6
 73936-91-1, 2-(2-Hydroxy-3-.alpha.-cumyl-5-tert-octylphenyl)-2H-
 benzotriazole 82493-14-9 82678-02-2 84268-23-5 84268-36-0
 88778-21-6 92484-48-5 92484-48-5, Cibafast W) 94134-93-7
 94271-84-8 95407-69-5 96623-58-4 104810-48-2, Tinuvin" 1130
 122413-85-8 123373-68-2 126463-38-5 128757-78-8 131452-29-4
 132207-24-0 133121-95-6 144557-01-7 148236-67-3 153784-60-2
 153784-61-3 153784-62-4 154186-10-4 178905-31-2 179552-49-9
 182235-14-9 184840-94-6 192662-79-6, 4,6-Bis(2,4-dimethylphenyl)-
 2-(4-(3-dodecyloxy*-2-hydroxypropoxy)-2-hydroxyphenyl)s-triazine
 204583-60-8 220410-71-9 220410-73-1 220410-74-2 220410-75-3
 220410-76-4 220410-77-5 220410-78-6 220410-79-7 220410-80-0
 220410-81-1 220410-82-2 220410-83-3 220410-84-4

(inhibition of pulp and paper yellowing using nitroxides and
 other co-additives)

IT 82050-42-8P 83646-11-1P 150981-00-3P 217496-11-2P
 217496-12-3P 217496-13-4P 217496-14-5P 220410-85-5P
220410-86-6P 220410-87-7P 220410-88-8P 220410-89-9P
 220410-90-2P **220410-91-3P 220410-92-4P**
 220410-94-6P 220410-95-7P 220410-97-9P 220410-98-0P
 220410-99-1P 220411-00-7P 220411-01-8P 220411-02-9P

220411-03-0P 220411-04-1P 220411-05-2P 220411-06-3P
220411-07-4P 220411-08-5P
(inhibition of pulp and paper yellowing using nitroxides and
other coadditives)

IT 220410-93-5P
(intermediate for manuf. of yellowing inhibitor for pulp and
paper)

IT 64-19-7, Acetic acid, reactions 67-48-1, (2-
Hydroxyethyl)trimethylammonium chloride 68-10-0, Bromoacetate
77-92-9, Citric acid, reactions 105-36-2, Ethyl bromoacetate
105-45-3, Methyl acetoacetate 106-65-0 106-89-8,
Epichlorohydrin, reactions 106-94-5, 1-Bromopropane 106-95-6,
Allyl bromide, reactions 108-24-7 109-89-7, reactions
109-94-4, Ethyl formate 111-36-4, Butyl isocyanate 111-42-2,
reactions 111-64-8, Octanoyl chloride 124-40-3, Dimethylamine,
reactions 144-62-7, Ethanedioic acid, reactions 6290-49-9,
Methyl methoxyacetate 6482-24-2, 2-Bromoethyl methyl ether
7646-69-7, Sodium hydride 7664-93-9, Sulfuric acid, reactions
13093-04-4, N,N'Dimethylhexamethylenediamine 15875-97-5,
Trimethylammonium hydroxide 16024-55-8, 2-Methoxyethoxyacetyl
chloride 17640-28-7, Methyl 2-methoxyethoxyacetate 36177-92-1,
4-Butylamino-2,2,6,6-tetramethylpiperidine 38870-89-2,
Methoxyacetyl chloride 83343-61-7, Dibromohexane 102639-37-2
(reactant for manuf. of yellowing inhibitor for pulp and paper)

IT 124-41-4, Sodium methoxide 1310-73-2, Sodium hydroxide, uses
7647-01-0, Hydrogen chloride, uses
(reagent; reactant for manuf. of yellowing inhibitor for pulp and
paper)

IT 6599-87-7P 87321-85-5P 220411-10-9P 220411-11-0P
220411-12-1P 220411-13-2P 220411-14-3P 220411-15-4P
220411-16-5P 220411-17-6P 220411-19-8P 220411-21-2P
220411-23-4P 220411-24-5P 220411-26-7P 220411-28-9P
(yellowing inhibitor for pulp and paper and manuf.)

IT 3637-11-4P, 1-Hydroxy-2,2,6,6-tetramethyl-4-oxopiperidine
113682-53-4P 132416-55-8P 220411-09-6P
(yellowing inhibitor for pulp and paper and manuf.)

IT 7803-49-8, Hydroxylamine, uses 30538-92-2
(yellowing inhibitor for pulp and paper and manuf.)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

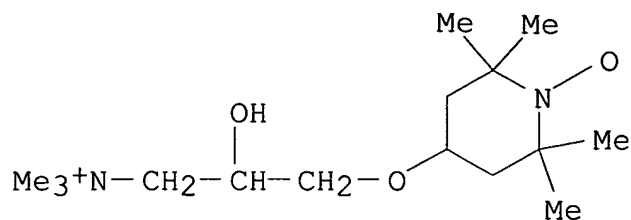
(1) BASF AG; DE 19510184 A 1996 ZCAPLUS
(2) Centre Technique de L'Industrie des Papiers, Cartons et Celluloses;
FR 2636358 A 1990
(3) Ciba-Geigy AG; EP 0309401 A 1989 ZCAPLUS
(4) Ciba-Geigy AG; EP 0389429 A 1990 ZCAPLUS
(5) Hitoshi, I; JP 04362632 A ZCAPLUS
(6) Smith, F; US 3832277 A 1974 ZCAPLUS

IT 220410-86-6P 220410-91-3P 220410-92-4P

(inhibition of pulp and paper yellowing using nitroxides and other coadditives)

RN 220410-86-6 ZCAPLUS

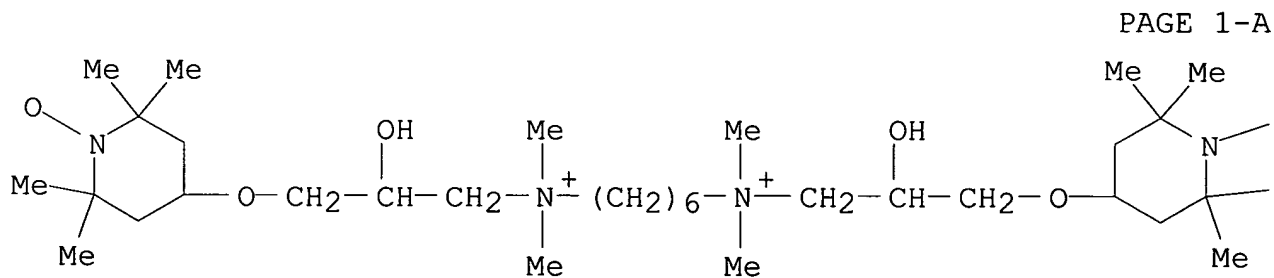
CN 1-Piperidinyloxy, 4-[2-hydroxy-3-(trimethylammonio)propoxy]-2,2,6,6-tetramethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 220410-91-3 ZCAPLUS

CN 1-Piperidinyloxy, 4,4'-[1,6-hexanediylbis[(dimethyliminio)(2-hydroxy-3,1-propanediyl)oxy]]bis[2,2,6,6-tetramethyl-, dibromide (9CI) (CA INDEX NAME)



● 2 Br⁻

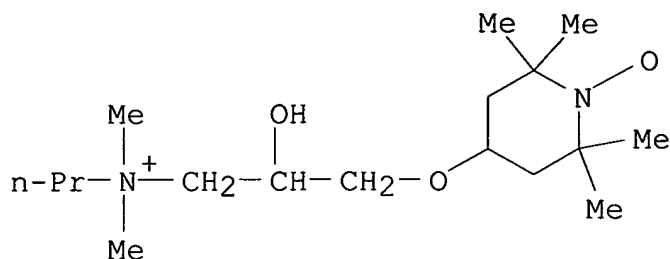
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RN 220410-92-4 ZCAPLUS

CN 1-Piperidinyloxy, 4-[3-(dimethylpropylammonio)-2-hydroxypropoxy]-
2,2,6,6-tetramethyl-, chloride (9CI) (CA INDEX NAME)● Cl⁻

L16 ANSWER 4 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:31510 ZCAPLUS

DN 116:31510

ED Entered STN: 24 Jan 1992

TI Spirooxazine-type photochromic materials

IN Yamamoto, Shinichi; Taniguchi, Takashi

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09K009-02

CC 74-9 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03066790	A2	19910322	JP 1989-203448	19890804

PRAI JP 1989-203448

19890804

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 03066790	ICM	C09K009-02

AB The title photochromic materials are spirooxazine derivs. contg.

.gtoreq.1 functional groups selected from photostabilizer groups, antioxidant groups, singlet O deactivating groups, and triplet light quenching groups. These materials are useful in printing, optical instruments, recording, clothing, and decorative materials.

ST photochromic material spirooxazine; recording photochromic spirooxazine; printing photochromic spirooxazine

IT Photochromic substances
(spirooxazine derivs.)

IT 9011-14-7, Poly(methyl methacrylate)
(photochromic spirooxazine-incorporating)

IT **138220-38-9P**
(prepn. and reaction of, photochromic material from)

IT 138220-43-6P 138220-44-7P 138220-46-9P
(prepn. and reaction of, photochromic spirooxazine from)

IT 138220-31-2P 138220-32-3P 138220-33-4P 138220-34-5P
138220-35-6P 138220-36-7P 138220-37-8P 138245-22-4P
(prepn. and use of, as photochromic material)

IT 1640-39-7 27428-79-1 104989-11-9 138220-39-0 138220-41-4
138220-42-5
(reaction of, photochromic material from)

IT 5382-16-1, 4-Piperidinol
(reaction of, photochromic material intermediate from)

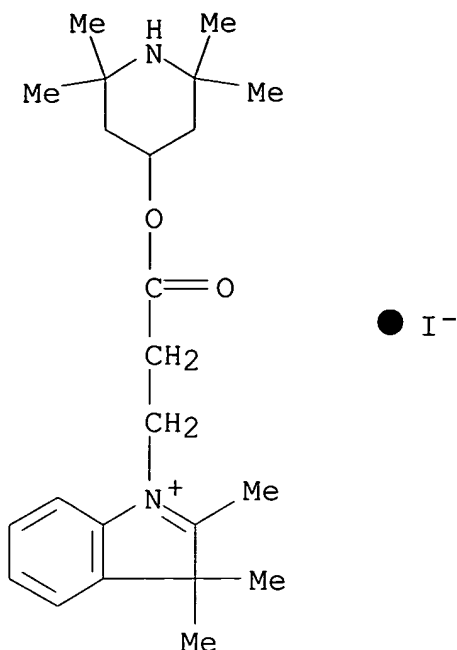
IT 111-50-2, Hexanedioyl dichloride 550-60-7 2403-88-5 36768-62-4
119266-79-4 138220-40-3
(reaction of, photochromic spirooxazine from)

IT 138220-45-8
(reaction of, photochromic spirooxazine intermediate from)

IT **138220-38-9P**
(prepn. and reaction of, photochromic material from)

RN 138220-38-9 ZCAPLUS

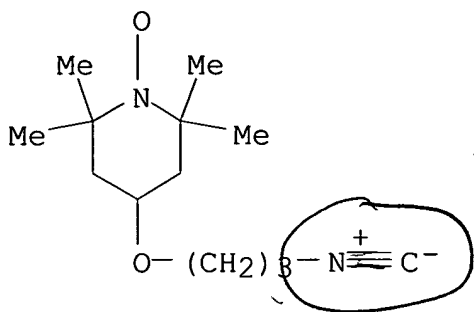
CN 3H-Indolium, 2,3,3-trimethyl-1-[3-oxo-3-[(2,2,6,6-tetramethyl-4-piperidinyl)oxy]propyl]-, iodide (9CI) (CA INDEX NAME)



L16 ANSWER 5 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:525852 ZCAPLUS
 DN 101:125852
 ED Entered STN: 13 Oct 1984
 TI Motional dynamics of a spin labeled substrate analog bound to
 cytochrome P-450: saturation transfer EPR studies
 AU Schwarz, D.; Pirrwitz, J.; Rein, H.; Ruckpaul, K.
 CS Cent. Inst. Mol. Biol., Ger. Acad. Sci., Berlin-Buch, 1115, Ger.
 Dem. Rep.
 SO Biomedica Biochimica Acta (1984), 43(3), 295-307
 CODEN: BBIADT; ISSN: 0232-766X
 DT Journal
 LA English
 CC 7-5 (Enzymes)
 AB The rotational motion of the spin-labeled substrate analog
 n-propylisocyanide bound to the active center of cytochrome P 450
 was studied by satn. transfer EPR. The obsd. motional rate
 characterized by an effective rotational correlation time .tau.R of
 .apprx.40 ns at 20.degree. is .gtoreq.3 orders of magnitude higher
 than the macromol. rotational diffusion of cytochrome P 450 in the
 microsomal membrane and represents a considerable motion in relation
 to the whole enzyme mol. The .tau.R value is independent on the
 degree of purifn. of the enzyme system, as revealed by measurements
 of (1) liver microsomes, (2) partially purified cytochrome P 450,
 and (3) cytochrome P 450 LM2, but shows a characteristic temp.

dependence in the case of microsomes resulting in breaks in the Arrhenius plot at temps. which correspond to phase transitions of the phospholipids. Apparently, the mobility of the bound substrate analog reflects a relatively high conformational flexibility of the substrate binding region which depends on the state of the lipids and can therefore be influenced by them. These results support the assumption that cytochrome P 450 is capable of forming manifold binding to substrate mols. differing in stereochem. structures because of the conformational flexibility of its binding region.

ST cytochrome P450 substrate analog mol dynamics
IT Phospholipids
 (cytochrome P 450 assocn. with, in liver microsomes, phase transition and active site conformation in relation to)
IT Liver, composition
 (cytochrome P 450 of microsomes of, conformational flexibility of active site of)
IT Microsome
 (cytochrome P 450 of, conformational flexibility of active site of, phospholipids in relation to)
IT Conformation and Conformers
 (of cytochrome P 450 active site, flexibility of, microsomal lipids in relation to)
IT Phase transition
 (of phospholipids assocd. with cytochrome P 450 of liver microsomes)
IT Molecular dynamics
 (of propylisocyanide bound to cytochrome P 450)
IT **71133-03-4**
 (binding of, to cytochrome P 450, active site conformational flexibility in relation to)
IT 9035-51-2, biological studies
 (substrate analog bound to, motional dynamics of, active site conformational flexibility and assocd. lipids in relation to)
IT **71133-03-4**
 (binding of, to cytochrome P 450, active site conformational flexibility in relation to)
RN 71133-03-4 ZCAPLUS
CN 1-Piperidinyloxy, 4-(3-isocyanopropoxy)-2,2,6,6-tetramethyl- (9CI)
 (CA INDEX NAME)



*Triple Bond
No within claimed invention*

L16 ANSWER 6 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:486416 ZCAPLUS
 DN 91:86416
 ED Entered STN: 12 May 1984
 TI Stereochemical properties of the binding site of liver microsomal cytochrome P-450 as studied by substrate analogs spin labels
 AU Pirrwitz, J.; Lassmann, G.; Rein, H.; Jaenig, G. R.; Pecar, S.; Ruckpaul, K.
 CS Cent. Inst. Mol. Biol., Ger. Acad. Sci., Berlin, 1115, Ger. Dem. Rep.
 SO Acta Biologica et Medica Germanica (1979), 38(2-3), 235-47
 CODEN: ABMGAJ; ISSN: 0001-5318
 DT Journal
 LA English
 CC 7-5 (Enzymes)
 Section cross-reference(s): 6
 AB For characterization of the substrate binding site, optical and EPR measurements with spin-labeled substrates on solubilized and pure cytochrome P-450 were performed. Analogously to the unlabeled derivs., spin-labeled n-alkylamines and isocyanides with different chain lengths are type II substrates. The KS values evaluated from optical (P-450 = 1.98 .times. 10⁻⁶M) and ESR (P-450 = 1.98 .times. 10⁻⁴M) measurements are very similar, indicating no concn. dependences. Contrary to the unlabeled n-alkylamines, the spin-labeled compds. show an affinity almost independent of the chain lengths. The spin-labeled substrates with a short distance between the functional group and the NO-group bound to P-450 induce pronounced changes of the ligand field of the heme Fe and a large broadening of the signal of the immobilized nitroxide, indicating intensive interactions between the unpaired electron of the NO group and the paramagnetic heme Fe. Elongation of the alkyl chains results in spectra of the Fe³⁺ complexes with only slight modification and a still unbroadened signal of the immobilized NO group. The binding of the substrate through their functional groups together with a 1:1 stoichiometry of the P-450-spin-labeled isocyanide complex give evidence for the same binding site in the

near vicinity of the heme Fe.

ST cytochrome P450 substrate binding site; spin label cytochrome P450 ESR

IT Liver, composition
(cytochrome P-450 of microsomes of, substrate binding site of)

IT Microsome
(cytochrome P-450 of, of liver, substrate binding site of)

IT Electron spin resonance
Ultraviolet and visible spectra
(of spin-labeled cytochrome P-450 complexes)

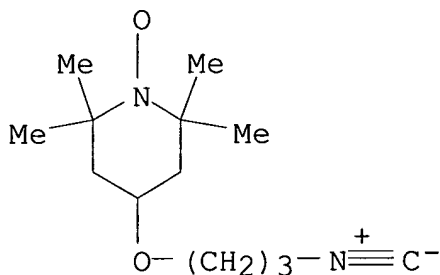
IT 37654-42-5 55775-29-6 61948-25-2 65272-09-5 65272-10-8
71133-03-4
(cytochrome P 450 binding of, ESR of)

IT 9035-51-2, properties
(substrate binding site of, of liver microsome, ESR in relation to)

IT **71133-03-4**
(cytochrome P 450 binding of, ESR of)

RN 71133-03-4 ZCAPLUS

CN 1-Piperidinyloxy, 4-(3-isocyanopropoxy)-2,2,6,6-tetramethyl- (9CI)
(CA INDEX NAME)



L16 ANSWER 8 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:137443 ZCAPLUS
 DN 88:137443
 ED Entered STN: 12 May 1984
 TI Diazocarboxylic acid derivatives useful for stabilizing polymers
 IN Malherbe, Roger; Rasberger, Michael
 PA Ciba-Geigy A.-G., Switz.
 SO Ger. Offen., 28 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC C07D211-16
 CC 36-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 27

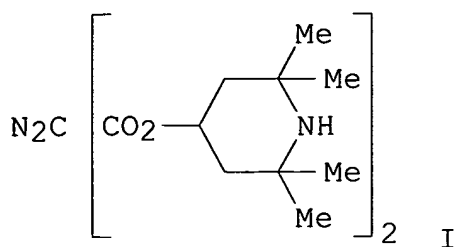
FAN.CNT 1

	PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	DE 2727385	A1	19771229	DE 1977-2727385	197706 18
	US 4154722	A	19790515	US 1977-807960	197706 20
	FR 2355825	A1	19780120	FR 1977-19091	197706 22
	FR 2355825	B1	19800201		
	GB 1521855	A	19780816	GB 1977-26027	197706 22
	JP 52156873	A2	19771227	JP 1977-74924	197706 23
PRAI CH 1976-8015		A	19760623		

CLASS

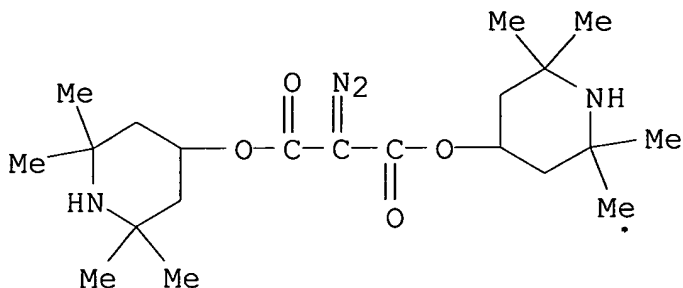
PATENT NO. -----	CLASS -----	PATENT FAMILY CLASSIFICATION CODES -----
DE 2727385	IC	C07D211-16
US 4154722	NCL	524/099.000; 524/102.000; 524/103.000; 534/556.000; 546/190.000

GI



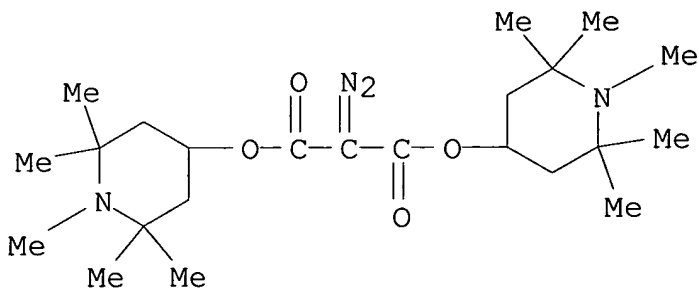
- AB Diazoacetyl derivs. of hindered amino- or hydroxypiperidines are light stabilizers for polymers, which react with the polymers when heated at >100.degree. or irradiated with UV light. Thus, stirring 19.1 g bis(2,2,6,6-tetramethyl-4-piperidiny)l malonate [56677-79-3], 9.9 g p-MeC₆H₄SO₃N₃ [941-55-9], 7.1 mL Et₃N, and 85 mL MeCN 24 h at room temp. gives bis(2,2,6,6-tetramethyl-4-piperidiny)l diazomalonate (I) [65740-18-3]. Polypropylene [9003-07-0] contg. 0.2 phr octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate and 0.25 phr I requires 14,170 h xenotest exposure to reach a carbonyl extinction coeff. (5.85.mu.) of 0.3, compared with 1050 h in the absence of I.
- ST diazomalonate piperidinol light stabilizer; polypropylene light stabilizer; malonate reaction toluenesulfonyl azide
- IT Light stabilizers
(piperidine diazoacyl derivs., for plastics)
- IT 9003-07-0
(light stabilizers for, piperidine diazoacyl derivs. as)
- IT **65740-18-3 65740-19-4 65740-21-8**
65740-22-9 65740-24-1 65740-25-2
 65740-26-3 **65740-27-4 65740-28-5**
65740-29-6 65740-30-9 65740-34-3
 65740-35-4 **65740-36-5** 65740-37-6 **65774-19-8**
 (light stabilizers, for plastics)
- IT 941-55-9
(reaction of, with piperidine acyl derivs.)
- IT 56677-81-7 65374-31-4 65740-31-0 65740-32-1 65740-33-2
(reaction of, with toluenesulfonyl azide)
- IT 56677-78-2 56677-79-3 63864-28-8 63864-30-2 65740-20-7
 65740-23-0
 (reaction of, with toluenesulfonylazide)
- IT **65740-18-3 65740-19-4 65740-21-8**
65740-22-9 65740-24-1 65740-25-2
65740-27-4 65740-28-5 65740-29-6
65740-30-9 65740-34-3 65740-36-5
65774-19-8
 (light stabilizers, for plastics)
- RN 65740-18-3 ZCAPLUS

CN Propanedioic acid, diazo-, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester (9CI) (CA INDEX NAME)



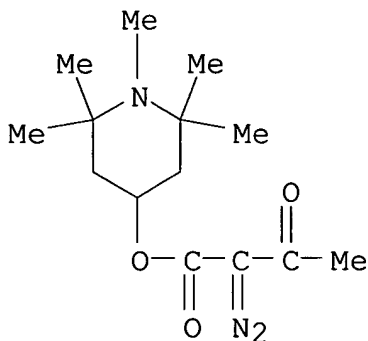
RN 65740-19-4 ZCAPLUS

CN Propanedioic acid, diazo-, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester (9CI) (CA INDEX NAME)

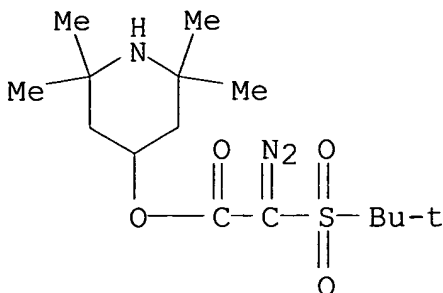


RN 65740-21-8 ZCAPLUS

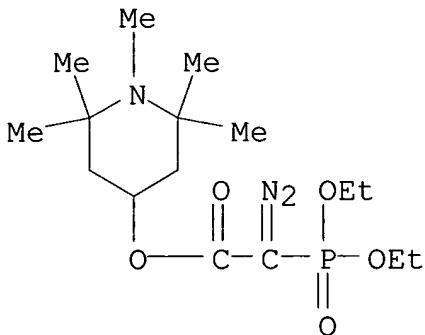
CN Butanoic acid, 2-diazo-3-oxo-, 1,2,2,6,6-pentamethyl-4-piperidinyl ester (9CI) (CA INDEX NAME)



RN 65740-22-9 ZCAPLUS

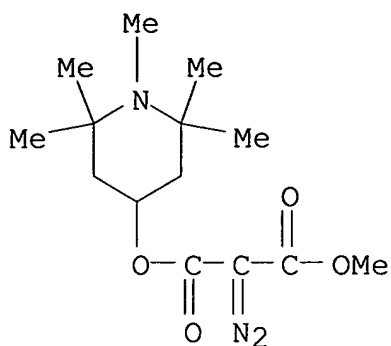
CN Acetic acid, diazo[(1,1-dimethylethyl)sulfonyl]-,
2,2,6,6-tetramethyl-4-piperidiny l ester (9CI) (CA INDEX NAME)

RN 65740-24-1 ZCAPLUS

CN Acetic acid, diazo(diethoxyphosphinyl)-, 1,2,2,6,6-pentamethyl-4-
piperidiny l ester (9CI) (CA INDEX NAME)

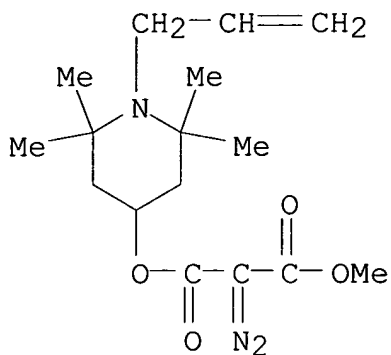
RN 65740-25-2 ZCAPLUS

CN Propanedioic acid, diazo-, methyl 1,2,2,6,6-pentamethyl-4-
piperidiny l ester (9CI) (CA INDEX NAME)



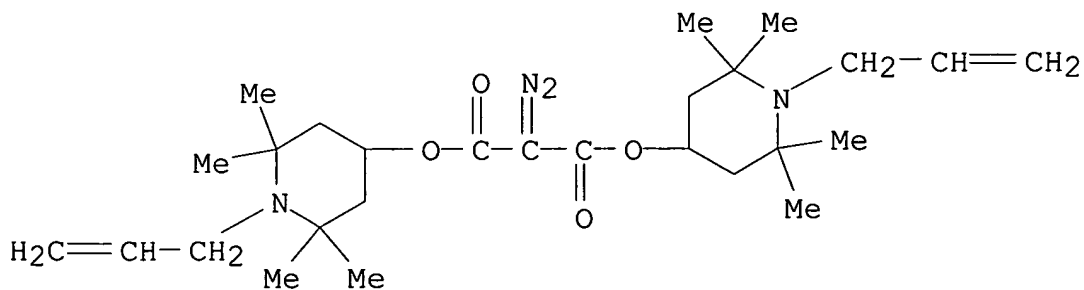
RN 65740-27-4 ZCAPLUS

CN Propanedioic acid, diazo-, methyl 2,2,6,6-tetramethyl-1-(2-propenyl)-4-piperidinyl ester (9CI) (CA INDEX NAME)



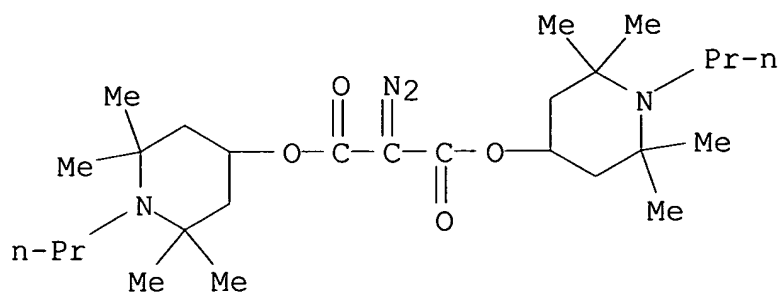
RN 65740-28-5 ZCAPLUS

CN Propanedioic acid, diazo-, bis[2,2,6,6-tetramethyl-1-(2-propenyl)-4-piperidinyl] ester (9CI) (CA INDEX NAME)



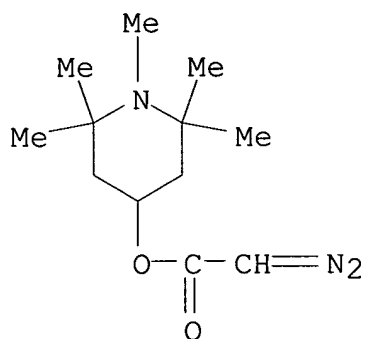
RN 65740-29-6 ZCAPLUS

CN Propanedioic acid, diazo-, bis(2,2,6,6-tetramethyl-1-propyl-4-piperidiny) ester (9CI) (CA INDEX NAME)



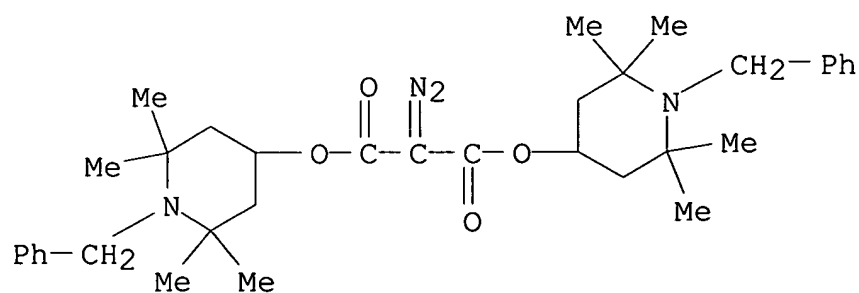
RN 65740-30-9 ZCAPLUS

CN Acetic acid, diazo-, 1,2,2,6,6-pentamethyl-4-piperidiny ester (9CI)
(CA INDEX NAME)



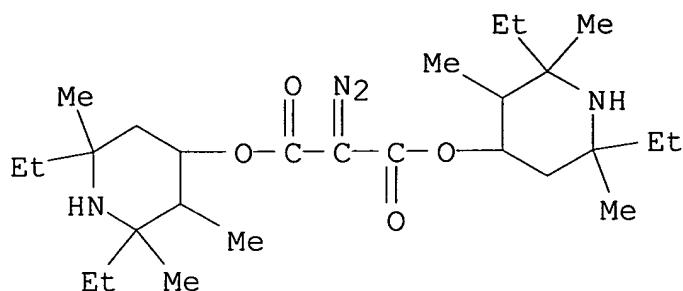
RN 65740-34-3 ZCAPLUS

CN Propanedioic acid, diazo-, bis[2,2,6,6-tetramethyl-1-(phenylmethyl)-4-piperidiny] ester (9CI) (CA INDEX NAME)



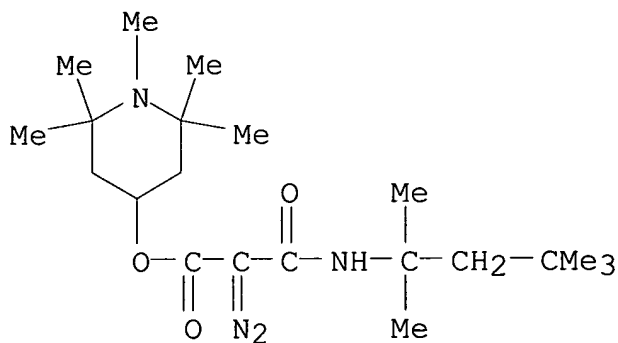
RN 65740-36-5 ZCAPLUS

CN Propanedioic acid, diazo-, bis(2,6-diethyl-2,3,6-trimethyl-4-piperidiny) ester (9CI) (CA INDEX NAME)



RN 65774-19-8 ZCAPLUS

CN Propanoic acid, 2-diazo-3-oxo-3-[(1,1,3,3-tetramethylbutyl)amino]-, 1,2,2,6,6-pentamethyl-4-piperidiny ester (9CI) (CA INDEX NAME)



L16 ANSWER 9 OF 9 ZCAPLUS COPYRIGHT 2005 ACS on STN

AN 1972:85887 ZCAPLUS

DN 76:85887

ED Entered STN: 12 May 1984

TI Synthesis and some spin-labeled inhibitors and choline esterase substrate

AU Rozantsev, E. G.; Grigoryan, G. L.; Gusovskaya, T. P.; Godovikov, N. N.; Teplov, N. E.

CS Inst. Khim. Fiz., Moscow, USSR

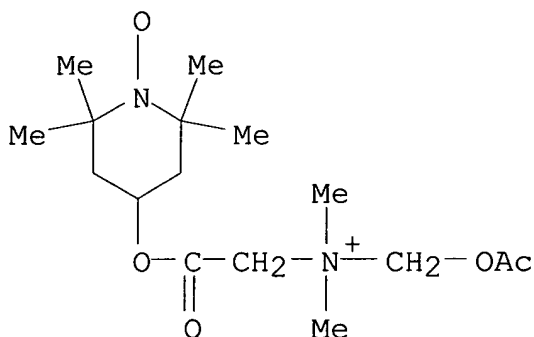
SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1971), (10), 2334-6

CODEN: IASKA6; ISSN: 0002-3353

DT Journal

LA Russian

- CC 29 (Organometallic and Organometalloidal Compounds)
 Section cross-reference(s): 27, 7, 13
- AB Treating 2,2,6,6-tetramethyl-4-chloroacetoxypiperidinoxy with
 AcOCH₂NMe₂ in Et₂O overnight gave I (R = Me, R₁ = AcOCH₂). Similar
 reaction with Et₃N gave I (R = R₁ = Et). MeP(O)(OEt)Cl,
 2,2,6,6-tetramethyl-4-hydroxypiperidinoxy, and Et₃N in Et₂O
 overnight gave the corresponding mixed methylphosphonate ester.
 p-O₂NC₆H₄OP(O)MeCl gave a similar mixed ester with the above
 hydroxyoxy radical. The products were spin-tagged structural units
 of inhibitors of cholinesterase activity.
- ST cholinesterase inhibitor; piperidino oxy quaternary amine; methyl
 phosphonate
- IT **35369-83-6P 35369-84-7P** 35369-85-8P
 35369-86-9P
 (prepn. of)
- IT **35369-83-6P 35369-84-7P**
 (prepn. of)
- RN 35369-83-6 ZCAPLUS
- CN 1-Piperidinyloxy, 4-[[[(acetyloxy)methyl]dimethylammonio]acetyl]oxy
]-2,2,6,6-tetramethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

- RN 35369-84-7 ZCAPLUS
- CN 1-Piperidinyloxy, 2,2,6,6-tetramethyl-4-
 [[(triethylammonio)acetyl]oxy]-, chloride (9CI) (CA INDEX NAME)

